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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,766 01/02/2002		Jeffery Tabor	659/919	6310
7590 11/22/2005			EXAMINER	
Robert N. Carpenter			PURVIS, SUE A	
BRINKS HOFER GILSON & LIONE P.O. BOX 10395			ART UNIT	PAPER NUMBER
CHICAGO, IL 60610			1734	

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/038,766	TABOR ET AL.			
Office Action Summary	Examiner	Art Unit			
	Sue A. Purvis	1734			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	e correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period to Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDO	ON. timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 31 C	october 2005.				
2a) This action is FINAL . 2b) ⊠ This	\cdot				
*	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11,	453 O.G. 213.			
Disposition of Claims		•			
4) Claim(s) <u>2,3,6-8 and 17-21</u> is/are pending in the	ne application.				
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>2,3,6-8 and 17-21</u> is/are rejected.		•			
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	or election requirement.				
Application Papers					
9) The specification is objected to by the Examine	<u> </u>				
10) The drawing(s) filed on is/are: a) acc		•			
Applicant may not request that any objection to the	•				
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	•				
Priority under 35 U.S.C. § 119		·			
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) All b) Some * c) None of:					
1. Certified copies of the priority documents have been received.2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the prior	• •				
application from the International Burea	•				
* See the attached detailed Office action for a list	of the certified copies not recei	ved.			
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Thterview Summa	nn/ (DTO 412)			
2) Notice of References Cited (P10-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail	Date			
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informa 6) Other:	al Patent Application (PTO-152)			
	٠, ٢, ٥, ١٥,٠ <u></u>				

DETAILED ACTION

Response to Amendment

- 1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
- 2. Unfortunately a Notice of Allowance cannot be issued at this time. The case has dragged out longer than it should, due to no fault of the applicant, but upon closer review of the references used previously and based on additional searching, the examiner is forced to make a new rejection at this time.
- 3. The indicated allowability of claims 2, 3, 6-8, and 17-20 is withdrawn. Rejections based on previously cited references follow.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

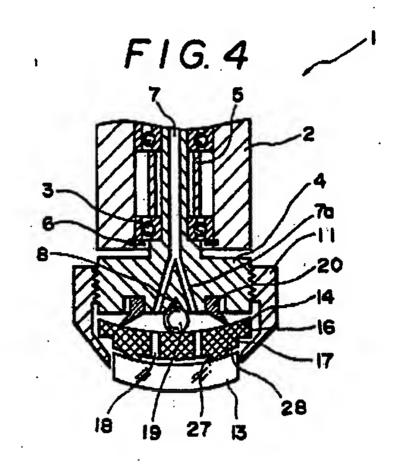
A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi et al. (US Patent No. 5,291,692).

Takahashi discloses a carrier body (4) having a discrete part engaging outer surface with a generally convex top portion (27) and a generally convex recessed portion spaced inwardly from the top portion. As seen in Figure 4, the top portion (27) engages a lens (13) and the recessed portion includes communicating holes (18). The lens (13) is held thereto through suction provided by a communicating hole (7) of the holder body (4) and the

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communicating hole (18) of the lens receptacle (14) under the drive of the suction pump (not shown). The holder body (4) is rotatably supported and formed on a rotating shaft which is rotatable about an axis substantially normal to the bottom surface of the recessed portion. The embodiment of interest is pictured below.



It appreciated that this prior art is not in the same field of endeavor of the apparatus presented in the applicant's specification. However, "apparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original). (See MPEP §2114.) "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). (See MPEP §2115.)

Regarding the preamble of the claim, "[I]f the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is necessary to give life, meaning, and vitality to the claim, then the claim preamble should be construed as if in the balance of the claim." *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165-66 (Fed. Cir. 1999). Any terminology in the preamble that limits the structure of the claimed invention must be treated as a claim

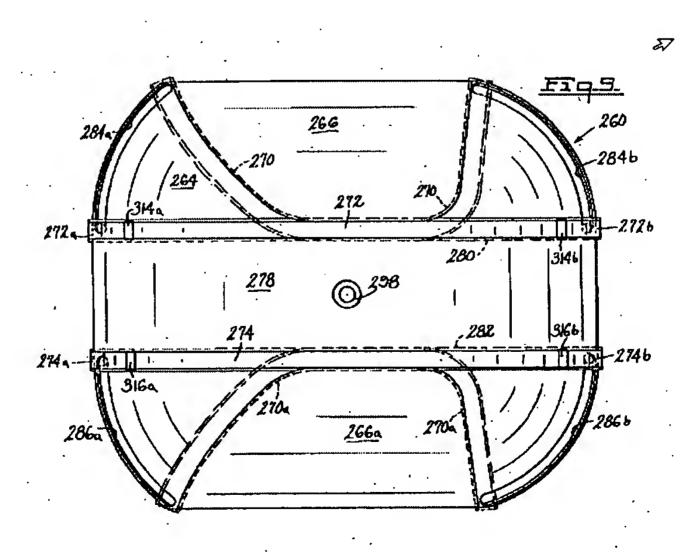
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limitation. See *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257, 9 USPQ2d 1962, 1966 (Fed. Cir. 1989). (See MPEP §2111.02.) It is the position of the examiner that nothing in the claim preamble limits the structure of the claimed invention.

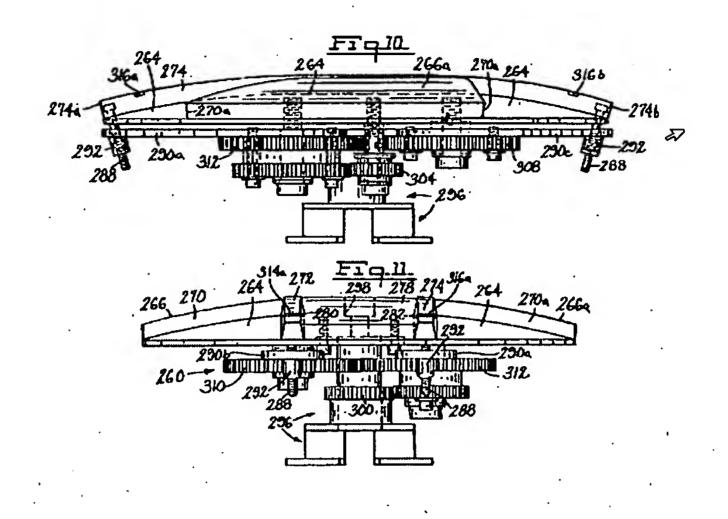
6. Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Oshefsky et al. (US Patent No. 4,578,133).

Oshefsky discloses an apparatus for applying discrete strips to a web of material. The embodiment of interest is the one shown in Figures 9, 10, and 11. Figure 9 shows a plain view of the transfer member (260) which as can be seen in Figures 10 and 11 has a generally beveled or convex upper surface (264). Of particular interest is the land portion (278) which includes is considered equivalent to applicant's recessed portion and the flexible strip supports (272, 274) which are considered equivalent to applicants top portion.

Oshefsky also teaches that the strips can be held to the transfer members with vacuum. The transfer member rotates at an axis normal to the bottom surface as shown in Figure 8. The Figures of interest to the examiner are presented below. (Col. 14, lines 42 through Col. 15, line 58; Col. 7, lines 48-53.)



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Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 2, 3, and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Oshefsky et al. (US Patent No. 4,578,133) in view of McCabe et al. (US Patent No. 6,482,278 B1) and Allen (US Patent No. 5,853,530).

Oshefsky discloses an apparatus for applying discrete strips to a web of material.

The embodiment of interest is the one shown in Figures 9, 10, and 11. Figure 9 shows a plain view of the transfer member (260) which as can be seen in Figures 10 and 11 has a generally beveled or convex upper surface (264). Of particular interest is the land portion (278) which includes is considered equivalent to applicant's recessed portion and the flexible strip supports (272, 274) which are considered equivalent to applicants top portion.

Oshefsky also teaches that the strips can be held to the transfer members with vacuum.

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The transfer member rotates at an axis normal to the bottom surface as shown in Figure 8.

The Figures of interest to the examiner are presented above. (Col. 14, lines 42 through Col. 15, line 58; Col. 7, lines 48-53.)

Oshefsky is drawn to transporting leg elastics, however, McCabe teaches that such a mechanism (42) could also be used to transport absorbent pads. It would have been obvious to one having ordinary skill in the art at the time the invention was made that the transfer mechanism in Oshefsky could also be used to transfer absorbent pads as shown in McCabe.

Oshefsky in view of McCabe does not disclose that the recessed portion is generally an hourglass shape. Allen discloses a label applicator which picks up a label (24) from a web (32) and teaches applying the label to an article (26). The applicator in Figure 6 shows the receiving face (62) having a recess (68) with a bottom surface. (Col. 9, lines 10-26.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a recess on the transfer element in Oshefsky in view of McCabe motivated by the fact that Allen teaches a recess is particularly helpful for labels with a relative thickness. Therefore, when there is a concern for the thickness of the element being transferred then a recess is within the purview of the artisan as taught by Allen. Furthermore, Allen suggests that the recess would be generally larger than the label applied and in the shape of the label. So when a recessed is used for transferring an absorbent pad, such as the one in McCabe, it is within the purview of the artisan to have the recess be in the shape of the absorbent pad, an hourglass shape.

Regarding <u>claim 2</u>, the recessed portion is located centrally as shown in Figure 9 of Oshefsky.

Regarding <u>claim 6</u>, Oshefsky discloses a carrier base adapted to support the transfer members as shown in Figure 8.

9. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshefsky in view of McCabe and Allen as applied to claim 3 above, and further in view of Boothe et al. (US Patent No. 5,716,478).

Regarding claim 7, Oshefsky in view of McCabe and Allen does not disclose a surface roughness. Boothe teaches that a surface roughness of about 3 micrometers is used in combination with a vacuum to keep elongated parts in their elongated state for transfer. (Col. 3, lines 36-39.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the surface of Oshefsky in view of McCabe and Allen be roughened as taught by Boothe, because Boothe teaches that the roughened surface helps keep the object being transferred in an elongated state, thus ensuring proper transfer to the web.

Regarding claim 8, Oshefsky in view of McCabe and Allen does not disclose the outer surface having a plasma coating thereon. Boothe teaches having the outer surface (46) of each transfer segment (40) be textured to define a surface roughness which assists in gripping and maintaining the discrete parts (26) on the outer surface (46). To achieve the desired surface roughness, the outer surface (46) of each transfer segment (40) may also include a coating such as a plasma coating as are known to those skilled in the art. (Col. 6, lines 15-41.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the surface of Oshefsky in view of McCabe and Allen coated by plasma as taught by Boothe, because Boothe teaches that such plasma coatings are known to those of ordinary skill in the art to achieve a desired roughened surface, thus helping hold the object to be transferred.

10. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boothe et al. (US Patent No. 5,716,478) in view of Schroth et al. (US Patent No. 4,608,115).

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Boothe discloses an apparatus for severing a first substrate web traveling at a first speed into discrete parts and applying the discrete parts onto a second substrate web traveling at a second speed. The apparatus includes the following:

- (a) a product web (28) conveyor which enables the web (28) to be traveling at a certain speed;
- (b) at least one transfer segment (40) which is configured to rotate about a first axis (44), the transfer segment (40) includes an outer surface which is configured to receive the discrete parts and apply the discrete parts to the second substrate web (28), the outer surface (46) may also include a plurality of holes therein through which a relatively low pressure or vacuum can be drawn;
- (c) a drive ring (60) which is configured to rotate about a second axis (64) which is offset from the first axis (44) of the transfer segment (40);
- (d) at least one coupler arm (70) is pivotally connected to the drive ring (60) about a pivot point (72), where the coupler (70) arm includes a cam end (76) which is configured to follow a predetermined curvilinear path and a crank end (78) which is slidably connected to the transfer segment (40);
- (e) a drive mechanism is configured to rotate the drive ring (60) about the second axis (64), as the drive ring (60) is rotated, the cam end (76) of the coupler arm (70) is guided along the curvilinear path and the crank end (78) of the coupler arm (70) slidably engages the transfer segment (40) thereby pivoting the coupler arm (70) about the pivot point (72) to vary an effective drive radius of the transfer segment (40) and rotate the transfer segment (40) at a variable speed. (Col. 2, lines 48-67; Col. 3, lines 1-7; Col. 5, line 24 through Col. 8, line 65.)

While Boothe et al. does not explicitly show the apparatus structure which enables the product web to be supported and advanced as required by the claim. The structure is

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inherent in such an apparatus otherwise the apparatus could not operate properly. An example of such structure is shown in Figure 1A of Schroth et al. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a web conveyor mechanism in the apparatus of Boothe which supports and advances the substrate web, because such a conveyor is needed to make the apparatus function properly.

Boothe does not disclose the surface of the transfer segment (40) to have a recessed portion having a bottom surface as required by the claim. Schroth et al. discloses transfer roller for applying a first material to a continually moving web. Figures 5 and 6 show the transfer segment (32) which includes a recessed portion having a bottom surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a recessed portion in the device of Boothe, because Schroth shows that use of a recessed portion is within the purview of one having ordinary skill in the art.

Furthermore, Booth teaches that the outer surface (46) of the transfer member (40) can have a rough surface to assist in gripping and maintaining the discrete parts there on.

(Boothe, Col. 6, lines 15-20.) Schroth includes a recessed portion with a screen (115) over the portion to help distribute the vacuum and ensure the vacuum created at the bottom of the recess portion engages the discrete part. (Schroth, Col. 5, lines 45-51.)

Regarding <u>claim 18</u>, in use the transfer segment (40) is configured to maintain a substantially constant first surface speed as the discrete parts are received and a substantially constant second surface speed as the discrete parts are applied to the second substrate web. (Col. 3, lines 3-7.)

Regarding <u>claim 19</u>, the first surface speed of the transfer segment (40) is substantially equal to the speed of the discrete parts and the second surface speed of the transfer segment (40) is substantially equal to the second speed of the second substrate web. (Col. 4, lines 1-7.)

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Regarding <u>claim 20</u>, Boothe includes a turning mechanism (110) for rotating the discrete parts (26) before they are applied to the second substrate web (28).

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boothe et al. (US Patent No. 5,716,478) in view of Schroth et al. (US Patent No. 4,608,115) and Allen (US Patent No. 5,583,530).

Boothe discloses an apparatus for severing a first substrate web traveling at a first speed into discrete parts and applying the discrete parts onto a second substrate web traveling at a second speed. The apparatus includes the following:

- (a) a product web (28) conveyor which enables the web (28) to be traveling at a certain speed;
- (b) at least one transfer segment (40) which is configured to rotate about a first axis (44), the transfer segment (40) includes an outer surface which is configured to receive the discrete parts and apply the discrete parts to the second substrate web (28), the outer surface (46) may also include a plurality of holes therein through which a relatively low pressure or vacuum can be drawn;
- (c) a drive ring (60) which is configured to rotate about a second axis (64) which is offset from the first axis (44) of the transfer segment (40);
- (d) at least one coupler arm (70) is pivotally connected to the drive ring (60) about a pivot point (72), where the coupler (70) arm includes a cam end (76) which is configured to follow a predetermined curvilinear path and a crank end (78) which is slidably connected to the transfer segment (40);
- (e) a drive mechanism is configured to rotate the drive ring (60) about the second axis (64), as the drive ring (60) is rotated, the cam end (76) of the coupler arm (70) is guided along the curvilinear path and the crank end (78) of the coupler arm (70) slidably engages the transfer segment (40) thereby pivoting the coupler arm (70) about the pivot

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point (72) to vary an effective drive radius of the transfer segment (40) and rotate the transfer segment (40) at a variable speed. (Col. 2, lines 48-67; Col. 3, lines 1-7; Col. 5, line 24 through Col. 8, line 65.)

While Boothe et al. does not explicitly show the apparatus structure which enables the product web to be supported and advanced as required by the claim. The structure is inherent in such an apparatus otherwise the apparatus could not operate properly. An example of such structure is shown in Figure 1A of Schroth et al. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a web conveyor mechanism in the apparatus of Boothe which supports and advances the substrate web, because such a conveyor is needed to make the apparatus function properly.

Boothe does not disclose the surface of the transfer segment (40) to have a recessed portion having a bottom surface as required by the claim. Allen discloses a label applicator which picks up a label (24) from a web (32) and teaches applying the label to an article (26). The applicator in Figure 6 shows the receiving face (62) having a recess (68) with a bottom surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a recess on the transfer element in Boothe motivated by the fact that Allen teaches a recess is particularly helpful for labels with a relative thickness. Therefore, when there is a concern for the thickness of the element being transferred then a recess is within the purview of the artisan as taught by Allen.

Regarding <u>claim 18</u>, in use the transfer segment (40) is configured to maintain a substantially constant first surface speed as the discrete parts are received and a substantially constant second surface speed as the discrete parts are applied to the second substrate web. (Col. 3, lines 3-7.)

Regarding <u>claim 19</u>, the first surface speed of the transfer segment (40) is substantially equal to the speed of the discrete parts and the second surface speed of the

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transfer segment (40) is substantially equal to the second speed of the second substrate web. (Col. 4, lines 1-7.)

Regarding claim 20, Boothe includes a turning mechanism (110) for rotating the discrete parts (26) before they are applied to the second substrate web (28).

12. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boothe et al. (US Patent No. 5,716,478) in view of McCabe et al. (US Patent No. 6,482,278 B1) and Allen (US Patent No. 5,583,530).

Boothe discloses an apparatus for severing a first substrate web traveling at a first speed into discrete parts and applying the discrete parts onto a second substrate web traveling at a second speed. The apparatus includes the following:

- (a) a product web (28) conveyor which enables the web (28) to be traveling at a certain speed;
- (b) at least one transfer segment (40) which is configured to rotate about a first axis (44), the transfer segment (40) includes an outer surface which is configured to receive the discrete parts and apply the discrete parts to the second substrate web (28), the outer surface (46) may also include a plurality of holes therein through which a relatively low pressure or vacuum can be drawn;
- (c) a drive ring (60) which is configured to rotate about a second axis (64) which is offset from the first axis (44) of the transfer segment (40);
- (d) at least one coupler arm (70) is pivotally connected to the drive ring (60) about a pivot point (72), where the coupler (70) arm includes a cam end (76) which is configured to follow a predetermined curvilinear path and a crank end (78) which is slidably connected to the transfer segment (40);
- (e) a drive mechanism is configured to rotate the drive ring (60) about the second axis (64), as the drive ring (60) is rotated, the cam end (76) of the coupler arm (70) is

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guided along the curvilinear path and the crank end (78) of the coupler arm (70) slidably engages the transfer segment (40) thereby pivoting the coupler arm (70) about the pivot point (72) to vary an effective drive radius of the transfer segment (40) and rotate the transfer segment (40) at a variable speed. (Col. 2, lines 48-67; Col. 3, lines 1-7; Col. 5, line 24 through Col. 8, line 65.)

While Boothe et al. does not explicitly show the apparatus structure which enables the product web to be supported and advanced as required by the claim. The structure is inherent in such an apparatus otherwise the apparatus could not operate properly. An example of such structure is shown in Figures 1A and 2 of McCabe et al. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a web conveyor mechanism in the apparatus of Boothe which supports and advances the substrate web, because such a conveyor is needed to make the apparatus function properly.

Boothe does not disclose the surface of the transfer segment (40) to have a recessed portion having a bottom surface as required by the claim. The device of Boothe is for leg elastics, but a similar transfer mechanism (42) is shown in McCabe which is used for absorbent pads. It would have been obvious to one having ordinary skill in the art at the time the invention was made that the device of Boothe could also be used to transport absorbent pads as shown in McCabe.

Allen discloses a label applicator which picks up a label (24) from a web (32) and teaches applying the label to an article (26). The applicator in Figure 6 shows the receiving face (62) having a recess (68) with a bottom surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a recess on the transfer element in Boothe in view of McCabe when the transfer elements are transferring absorbent pads motivated by the fact that Allen teaches a recess is particularly helpful for

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labels with a relative thickness and absorbent pads are known to have a thickness.

Therefore, when there is a concern for the thickness of the element being transferred then a recess is within the purview of the artisan as taught by Allen.

Regarding <u>claim 18</u>, in use the transfer segment (40) is configured to maintain a substantially constant first surface speed as the discrete parts are received and a substantially constant second surface speed as the discrete parts are applied to the second substrate web. (Col. 3, lines 3-7.)

Regarding <u>claim 19</u>, the first surface speed of the transfer segment (40) is substantially equal to the speed of the discrete parts and the second surface speed of the transfer segment (40) is substantially equal to the second speed of the second substrate web. (Col. 4, lines 1-7.)

Regarding claim 20, Boothe includes a turning mechanism (110) for rotating the discrete parts (26) before they are applied to the second substrate web (28).

Response to Arguments

13. Applicant's arguments with respect to claim 21 have been considered but are most in view of the new grounds of rejection.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue A. Purvis whose telephone number is (571) 272-1236. The examiner can normally be reached on Monday through Friday 9am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher A. Fiorilla can be reached on (571) 272-1187. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sue A. Purvis Primary Examiner Art Unit 1734

SP November 16, 2005